Asanté FriendlyNET FS4016P
16-port Dual-speed Fast Ethernet Switch
User's Guide

Product Introduction

Congratulations on your purchase of the Asanté FriendlyNET FS4016P. These switches were designed to give you the ultimate in performance, flexibility, ease-of-use, and reliability.

Your Asanté FriendlyNET FS4016P can increase performance on your network by bringing full Ethernet bandwidth to individual workgroups, or straight to the desktop, instead of requiring all stations to share the bandwidth of a single network. The switch's 100Mbps Fast Ethernet capability can eliminate bottlenecks in connections to servers, or can link 10Mbps workgroups to a 100Mbps Fast Ethernet network backbone.

For straight-through 10Base-T/100Base-TX connection to servers and workstations, the switch supports full-duplex connection, effectively doubling the total throughput on individual links. The switch's store-and-forward switching architecture forwards packets to their destination with a minimum of delay.

The switches can be placed on a tabletop or wall-mounted, and provide the ideal solution for your small, medium, or large Ethernet/Fast Ethernet network. It is designed to comply fully with the IEEE 802.3 Ethernet and 802.3u Fast Ethernet standards.

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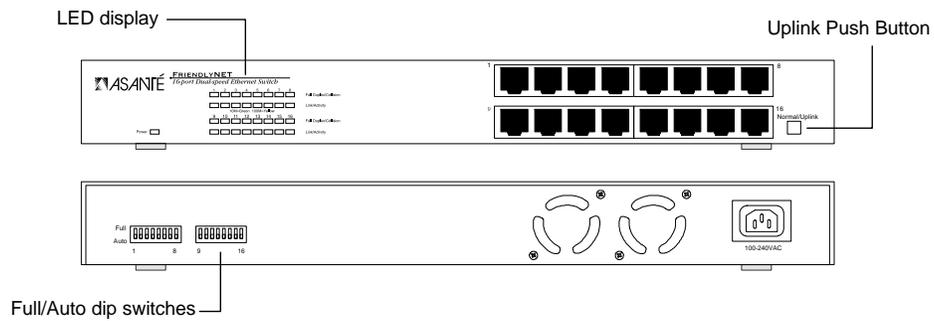
Package Contents

1. Asanté FriendlyNET FS4016P 16-port 10/100M Switch
2. Self-adhesive rubber pads for desktop installation
3. AC Power cord
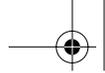4. Rack Mounting kit for rack installation
5. Installation guide

If any of these items are missing, contact your dealer immediately

Installation

The Asanté FriendlyNET FS4016P switch is easy to install and requires no special training. You should, however, read the following instructions carefully before proceeding to install your switch. The diagram below shows the layout of the front and rear panels.

Front & Rear Panel of the Asanté FriendlyNET FS4016P

LED display

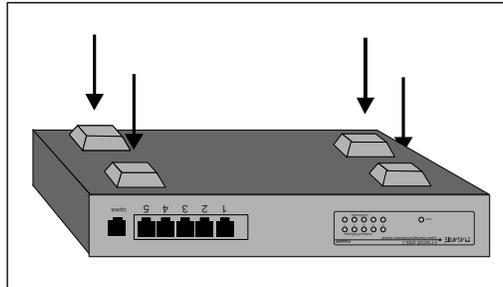Uplink Push Button

Full/Auto dip switches

The Asanté FriendlyNET FS4016P is designed for easy "plug and play" installation. Before you connect your switch to other devices, there are several issues you should keep in mind:

Δ When connecting the switch to a workstation using unshielded twisted pair cable, you must make sure that the cable length is not greater than 100 meters. 10Base-T twisted pair Ethernet cabling should be category 3 or better, and 100Base-TX twisted pair Fast Ethernet cabling should use tested category 5 cabling.

Δ Network cable segments can be connected to, or disconnected from the switch while the power is on. Plugging in or removing network cables while your switch is operating will not interrupt the operation of the switch.

Δ When placing your switch, you need to avoid dusty locations and electromagnetically noisy areas.

Desktop Placement

You can place the switch on a table. In this case, use the four self-adhesive feet, which are provided with the Asanté FriendlyNET FS4016P for cushioning purposes. Stick them on the four corners of the bottom surface of the switch, as shown in diagram below to cushion it against vibration.
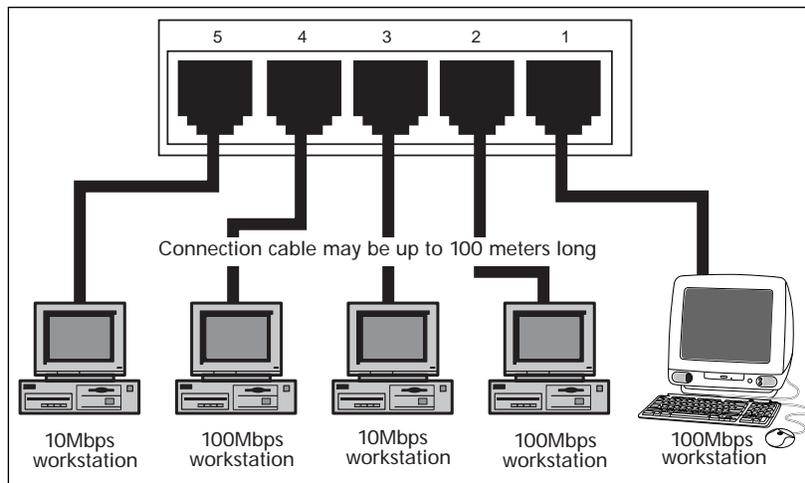
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Connecting to Servers and Workstations

Use the following procedure to connect a 10Base-T or 100Base-TX Ethernet server or workstation to the switch.

1. Make sure that the length of the straight-through cable between the switch and the station does not exceed 100 meters, including all patch cables and cross-connect wires.
2. Connect one end of the cable to the RJ-45 connector on the switch, and the other end to the station.
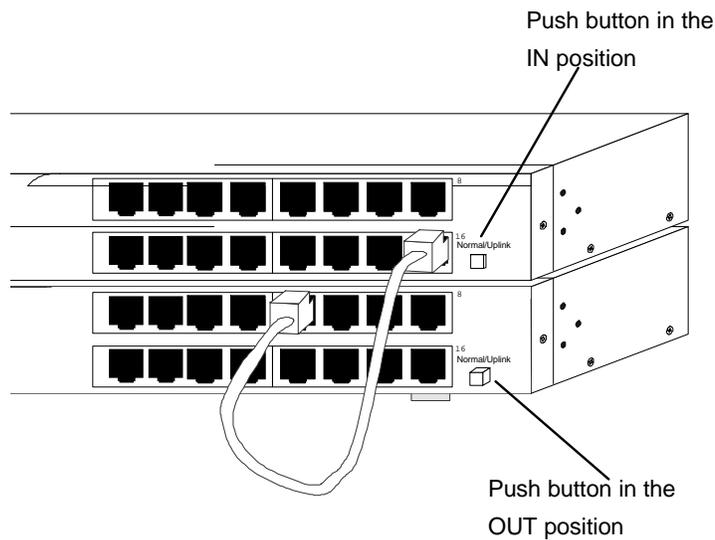

Connection cable may be up to 100 meters long

10Mbps workstation   100Mbps workstation   10Mbps workstation   100Mbps workstation   100Mbps workstation

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Using the Uplink connection

To connect a switch or hub, note the following:

1. One normal/uplink push button on the front panel allows users to select to connect to a PC or a hub/switch. The default setting is in the Normal (MDI-X) position, i.e. the out position. The port is configured to connect with a PC. When the push button is pressed in (MDI), it allows users to connect with a hub or a switch using straight-through twisted pair cable.

    Δ Use a straight-through cable to connect uplink port or use a crossover cable to connect to any port except uplink port. (Do not connect both uplink ports together, and do not use a crossover cable to connect with the uplink port).
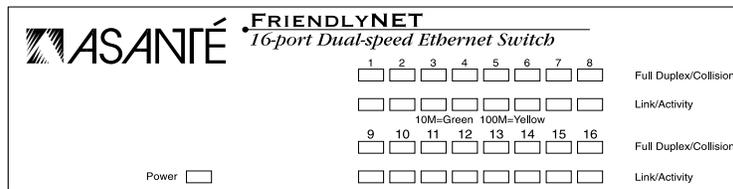

Push button in the
IN position

Push button in the
OUT position

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LED Indicators

Front Panel LED Indicators

Table 1: Power LED

Color	Status
Green	The switch is powered on and ready for use
OFF	The switch is powered off. Please check the following issues: • Make sure the power adapter is properly inserted into the power connector on the switch. • Determine whether or not the power adapter is functional by plugging another device into the receptacle

Table 2: Link/Activity

Color	Status
Off	No link is established on the port.
Green	A 10Mbps Link is established on the port.
Blinking green	A 10Mbps Link is established and traffic is being received.
Yellow	A 100Mbps link is established on the port.
Blinking Yellow	A 100Mbps link is established and traffic is being received.

Table 3: Full Duplex/Collision

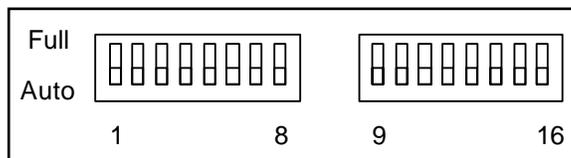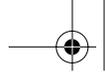| Color	Status
Off	There is no link. Or the port is operating in half-duplex mode.
Yellow	The port is operating in full-duplex mode.
Blinking Yellow	The port is in the half-duplex mode and a collision has occured.

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Full/Auto Dip Switch

By default each port is capable of full autonegotiation. In addition, each port may be manually config-
ured for full-duplex operation using the DIP switches on the rear panel of the switch.

> Δ If a port is configured for full-duplex operation, you must ensure that the link
> partner is also set for full duplex. Don't connect a hub to a port that is set for full
> duplex.

```
 Full   ┌────────────┐  ┌────────────┐
        │ ███████████ │  │ ███████████ │
 Auto   └────────────┘  └────────────┘
         1          8    9          16
```
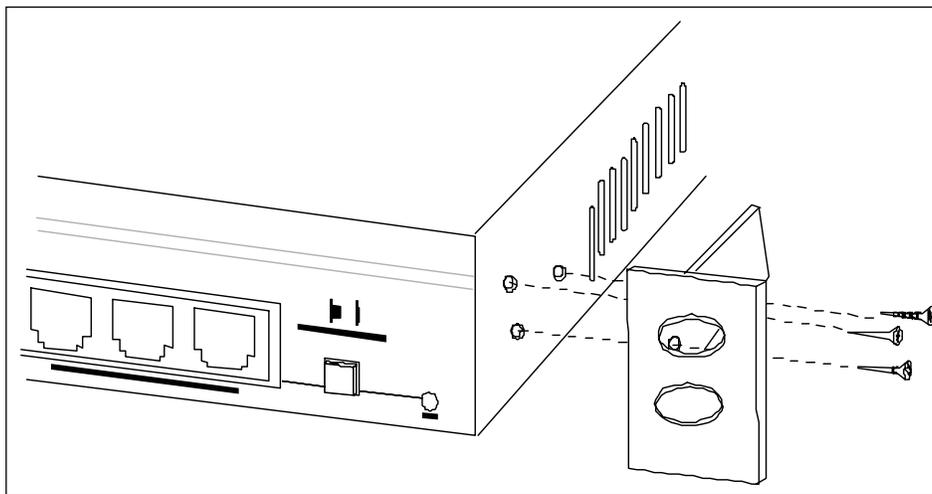
MOUNTING KIT INSTRUCTION

Asanté FriendlyNET FS4016P 16-port 10/100M Switch is supplied with two mounting brackets and six screws for mounting into a 19" rack.

Rack mounting in a 19" rack

1. Locate the mounting bracket over the mounting holes on each side of the switch.
2. Insert the screw through the bracket and into the bracket mounting holes in the switch.
3. Insert the unit into the 19-inch rack.

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TECHNICAL INFORMATION

StandardsSupported	IEEE802.3, IEEE802.3u, IEEE 802.3x
10/100Base-TX UTP/STP Port	16 N-WAY ports
Uplink port	Port #16
Cabling	UTP/STP Category 3, 4, 5 (100 ohm impedance)
Input voltage	100–240 Vac, 50/60Hz
Operating temperature	0–40° C (32–122° F)
Operating humidity	10–95%
Certification	FCC Class A and CE Class A
Dimensions	330mm (W) x 207mm (D) x 43mm (H)
	13" (W) x8.1" (D) x 1.6" (H)

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Contacting Technical Support

To contact Asanté Technical Support:

Telephone	(800) 622-7464
Fax	(801) 566-3787
E-mail	support@asante.com
World Wide Web Site	http://www.asante.com

Technical Support Hours

6:00 a.m. to 5:00 p.m. Pacific Standard Time USA, Monday - Friday.

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